

IN THE CLAIMS:

Claims 1-21 (Cancelled).

22. (New) An exercise apparatus which comprises (i) a resistance means able to provide resistance to a movement by a user and (ii) a vibration means able to impart a vibration to the user, which vibration means acts on a muscle or muscle group being exercised and in which the energy for the vibration means is provided by a movement or movements of the user.

23. (New) An exercise apparatus according to claim 22 in which the resistance means is selected from free weights, a weight machine, a spring resistance and a hydraulic resistance.

24. (New) An exercise apparatus according to claim 23 in which there is a moving component selected from one or more of a grip, bar, plate and handle and, in use, a user holds or presses against the moving component and the vibration means acts on the muscle or muscle group being exercised via the said moving component.

25. (New) An exercise apparatus according to claim 22 in which the vibration means is connected to a component of the apparatus which is to be moved and converts the motion of the said component of the apparatus to a rotational motion and the rotational motion is made intermittent by a means selected from a stick/slip mechanism, intermittent braking mechanism and a ratchet mechanism.

26. (New) An exercise apparatus according to claim 25 in which there is a cable or belt attached to the said moving component of the apparatus, which cable or belt passes over a pulley which comprises or connects to the vibration means.

27. (New) An exercise apparatus according to claim 22 in which the

vibration means comprises cable or belt which passes between two rollers that are rotated by movement of the cable or belt as it passes between them, the cable or belt connecting to a weight to be lifted and in which one of the rollers has areas of raised rubber equally spaced around the roller so that these areas exert a greater resistance to the cable or belt as this roller rotates and comes into contact with the other roller and in which there is a handle or grip attached to a cable or belt.

28. (New) An exercise apparatus according to claim 22 in which the vibration means comprises a fluid pumping means which is operated by a movement or movements of the user and a control means for intermittently varying the flow of fluid through the pumping means.

29. (New) An exercise apparatus according to claim 28 in which the control means is a control valve and the pumping means comprises a cylinder pump or a rotary pump.

30. (New) An exercise apparatus according to claim 28 in which the control means is a switchable valve system allowing single or double action with damping controlled by a damping control means selected from manual or mechanical means, electronic hardware control means and programmable software control means.

31. (New) An exercise apparatus according to claim 22 in which the frequencies of vibration are from 5 to 100 Hz.

32. (New) An exercise apparatus according to claim 25 in which the frequencies of vibration are from 5 to 100 Hz.

33. (New) An exercise apparatus for exercising the breathing muscles, which apparatus comprises a breathing means through which

a user can breath and an air flow interruption means connected to the breathing means, which interruption means is adapted to cause a periodic interruption to air flowing through the interruption means to the breathing means.

34. (New) An exercise apparatus according to claim 13 in which the breathing means comprise a mouthpiece adapted to fit over the mouth and nose of the user.

35. (New) An exercise apparatus according to claim 14 in which the interruption means comprises a mechanism selected from a valve mechanism and a reed valve system and an oscillating valve system and the air passing through valve mechanism is regularly interrupted.

36. (New) An exercise apparatus according to claim 14 in which the interruption means comprises a mechanically or electrically controlled valve mechanism which regularly and periodically interrupts the flow of air.

37. (New) An exercise apparatus according to claim 14 in which the interruption means comprises two discs, at least one of which can be rotated relative to the other, with each of the discs having at least one hole in it; the discs being positioned in the air flow so that, as one of the discs rotates relative to the other disc, the holes in the two discs are coincident periodically so as to form a continuous air flow passage.

38. (New) An exercise apparatus according to claim 14 in which the frequency of the interruptions to the flow of air is in the range of 5 to 100 Hz.